

WHAT IS CLAIMED IS:

1. A video signal processor circuit, comprising:

an amplifier circuit for amplifying by a predetermined gain
5 a video signal that is continuous for a unit of one screen image;
and

a clamp circuit for clamping a reference level of the amplified
video signal to a predetermined level; wherein

a time constant used for the clamping of the video signal
10 in the clamp circuit is set in accordance with the gain of the
amplifier circuit.

2. The video signal processor circuit as defined in Claim
1, wherein

15 the clamp circuit clamps the video signal in response to a
clamp pulse, and

a pulse width of the clamp pulse is adjusted in accordance
with the gain of the amplifier circuit so as to control the clamp
time constant.

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3. The video signal processor circuit as defined in Claim
2, further comprising:

a comparison circuit for comparing the gain value of the
amplifier circuit to a predetermined reference value; and

25 a clamp pulse generating circuit for adjusting the pulse width
of the clamp pulse in accordance with a comparison result obtained
in the comparison circuit.

4. The video signal processor circuit as defined in Claim 3, wherein

the pulse width of the clamp pulse generated in the clamp pulse generating circuit is varied in a stepwise manner.

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5. The video signal processor circuit as defined in Claim 4, wherein

the comparison circuit includes a first reference value and a second reference value, and exhibits a hysteresis characteristic when performing comparison of the first and second reference values to the gain value.

6. The video signal processor circuit as defined in Claim 1, wherein

the gain of the amplifier circuit is set in accordance with a direct current level of the video signal for one screen image, and maintained at a constant value with respect to the video signal for the subsequent one screen image.

7. The video signal processor circuit as defined in Claim 6, wherein

the clamp time constant used in the clamp circuit is set in accordance with the gain of the amplifier circuit for the current one screen image, and maintained at a constant value with respect to the video signal for the one screen image.